GT24B-B7076 Quick Installation Guide

Document # D2322 - 100/ Revision 1.0

1 General Information

Read Me First

1. The Barebone User's Manual is available for download from our Web site at http://www.tyan.com. Make sure to read all precautions and instructions before you start installing the server system.
2. Refer all servicing to qualified personnel to avoid the risk of damage to the server system.
3. Exercise normal ESD (Electrostatic Discharge) procedures during system integration. TYAN/MiTAC recommends wearing gloves and an anti-static wrist strap to avoid possible damage to the equipment.
4. Current processor socket design places the pins on the motherboard instead of the processor itself. Exercise caution when installing the processors as the manufacturer's warranty does not cover damage inflicted upon the motherboard, including damage to the CPU sockets.

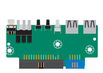
Box Content

1U barebone, (4) hot swap HDD bays

1+1 450W power supply unit (For B7076G24BV4HR SKU)

500W power supply unit (For B7076G24BV4H SKU)

TYAN® S7076 system board (pre-installed)


M1008-G2024

(6) System fans

M2091 Riser card

M2091-R Riser card

M1277

M7016-7066-PDB (for B7076G24BV4HR)

Accessories

CPU heatsink x 2

Sliding Rails x 2 & Screw Pack x 1

Quick Installation Guide x 1

Driver's and Utilities CD x 1

Mounting ear kit

AC Power cord (US)

AC Power Cord (EU)

Screw Pack x 3

Required Hardware Components

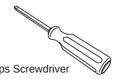
Minimum Hardware Requirements

To avoid integration difficulties and possible board damage, your system must meet the following minimum requirements:

- Processor: Dual Intel® Xeon E5-2600 v3 series processors
- Memory Type: Sixteen (8+8) 284-Pin DDR4 sockets, supports 1.2V 2133 MHz RDIMM / LRDIMM , DDR4 / DDR4LV / DDR4 LR
- Hard Disk Drives: 4-port SATA-III 6.0Gb/s hot swap 3.5" / 2.5" HDD with RAID 0, 1, 5, 10 (Intel® RST)
- Rack Mount Kit (Industry 19" rack-mountable)

NOTE: For an up to date list of compatible hardware, please visit the system's support page on www.tyan.com

Tools Required

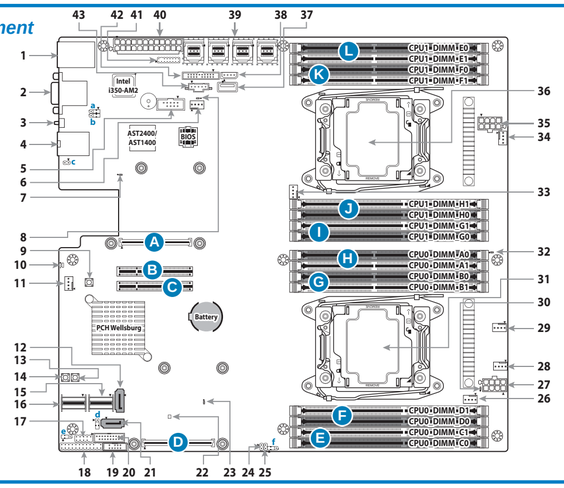

Phillips Screwdriver

Flat-head Screwdriver

Anti-Static Wrist Strap

2 Motherboard Placement

Motherboard Placement


43 42 41 40 39 38 37
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
18 19 20 21 22 23 24 25
36 35 34 33 32 31 30 29 28 27 26
CPU1 DIMM E0
CPU1 DIMM E1
CPU1 DIMM F0
CPU1 DIMM F1
CPU1 DIMM H1
CPU1 DIMM H0
CPU1 DIMM G1
CPU1 DIMM G0
CPU0 DIMM A0
CPU0 DIMM A1
CPU0 DIMM B0
CPU0 DIMM B1
CPU0 DIMM D1
CPU0 DIMM D0
CPU0 DIMM C1
CPU0 DIMM C0
Intel i350-AM2
AST2400/ AST1400
BIOS
PCH Wellsburg
Battery
A B C D E F G H I J K L
a b c d e f

CONNECTORS

1 RJ45 LAN Port #2 (LAN2) + USB 3.0 Ports (J25)
2 VGA Port / COM1 Port (J47)
3 ID LED Button (SW3)
4 RJ45 LAN Port #1 (LAN1) (J38)
5 COM2 Header (J68)
6 SYS_FAN_4 (J31)
7 BMC LED (LED1)
8 PSU Alert LED (LED10)
9 Clear CMOS Button (SW4)
10 Rear ID LED (LED7)
11 SYS_FAN_5 (J32)
12 7-pin Vertical SATA3.0 Connector (SATA5) (J46)
13 Reset Button (SW2)
14 Power Button (SW1)
15 SATA0~SATA3 (J41)
16 sSATA0~sSATA3 (J42)
17 USB2.0 Header (J37)
18 Front Panel Header (J50)
19 PCH SATA SGPIO Header for BB HD Board (J43)
20 USB3.0 Header (J36)
21 7-pin Vertical SATA3.0 Connector (SATA4) (J45)
22 PCH PWROK LED (LED2)
23 CATERR LED (LED3)
24 ID LED Button Header (Rear IDLED Header) (J56)
25 Chassis Intrusion Header (J57)
26 CPU0 FAN (J28)
27 SSI 8-pin CPU0 Power Connector (PW1)
28 SYS_FAN_3 (J35)
29 SYS_FAN_2 (J34)
30 CPU0 PWOK LED (LED8)
31 CPU0 Socket (U1)
32 CPU1 PWOK LED (LED9)
33 CPU1 FAN (J30)
34 SYS_FAN_1 (J33)
35 SSI 8-pin CPU1 Power Connector (PW3)
36 CPU1 Socket (U2)
37 Vertical Type-A USB2.0 Connector (J40)
38 IPMB Pin Header (J51)
39 Mini SAS HD Connectors (J20/J21/J22/J23)
40 ATX 24-pin Power Connector (PW2)
41 TYAN Module Header (J48)
42 FAN Header for BB FAN Board (J29)
43 PSMI Pin Header (J49)

SLOTS

A OCP slot for OCP Mezz card (J26)
B PCI-E 3.0x8 slot(x8link, open-end type) (#PCIe-6.5) (J18, support full height card)
C PCI-E 3.0x8 slot(x8link, open-end type) (#PCIe-6) (J19, support half height card)
D OCP slot for SAS Mezz card (J27)
E CPU0_DIMM_C0 / CPU0_DIMM_C1 (J5 / J6)
F CPU0_DIMM_D0 / CPU0_DIMM_D1 (J7 / J8)
G CPU0_DIMM_B0 / CPU0_DIMM_B1 (J3 / J4)
H CPU0_DIMM_A0 / CPU0_DIMM_A1 (J1 / J2)
I CPU1_DIMM_G0 / CPU1_DIMM_G1 (J13 / J14)
J CPU1_DIMM_H0 / CPU1_DIMM_H1 (J15 / J16)
K CPU1_DIMM_F0 / CPU1_DIMM_F1 (J11 / J12)
L CPU1_DIMM_E0 / CPU1_DIMM_E1 (J9 / J10)

JUMPERS

a COM2 or COM5 Selected Jumper (J64)
b COM2 or COM5 Selected Jumper (J63)
c BMC Reset Header (J55)
d NMI Jumper (J67)
e ME Recovery Mode Jumper (J62)
f ME Security Override Jumper (J60)

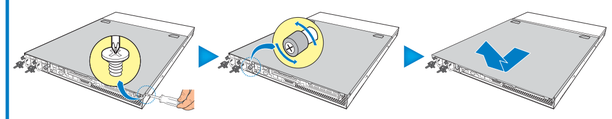
3 System Installation

Open the Chassis

Preparing the Chassis

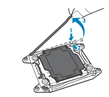
Read normal ESD (Electrostatic Discharge) procedures.

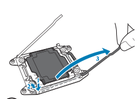
Place your TYAN® Server Chassis on a flat anti-static surface to perform the following integration procedures. Read ESD procedures before reaching inside to install components.



1 Remove the screw from the top cover.
2 Loosen the thumb screw on the rear side.
3 Slide to release the top cover and then remove.

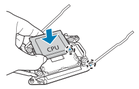
Install the Processor


1 Open the socket lever.

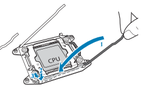

2 Open the other socket lever.

3 Open the CPU socket cover.

4 Remove the CPU protection cap attached on the socket cover.

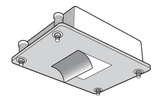

5 Install the processor and make sure the gold arrow is located in the right direction.

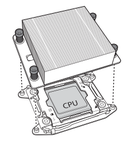
6 Close the CPU socket cover.

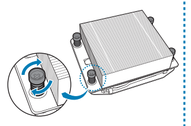

7 Close the socket levers.

8 Close the other socket lever.

Install the CPU Heatsink

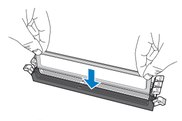

1 Remove the protective sheet.


2 Install the CPU heatsink.


3 Secure the heatsink screws.

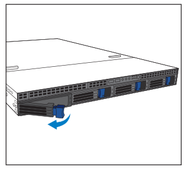
Install the Memory

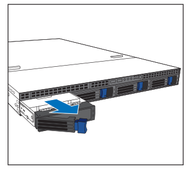
1 Unlock the clips.

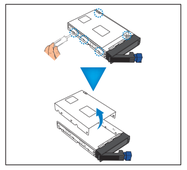

2 Insert the memory module.

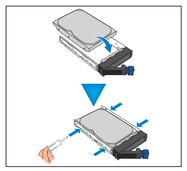
3 Lock the clips.

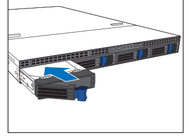
Install the Hard Disks (3.5")

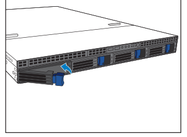

1 Press the locking lever and pull the locking lever open.


2 Slide the HDD tray out.

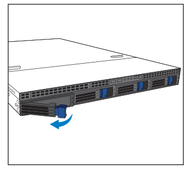

3 Unscrew the HDD tray bracket.

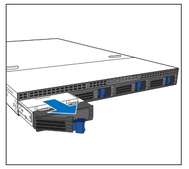

4 Place a hard drive onto the drive tray. Use four screws to secure the HDD.

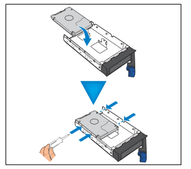

5 Reinsert the HDD tray into the chassis.

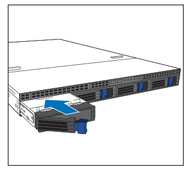

6 Press the locking lever to secure the tray. Repeat the same procedures to install other HDD trays.

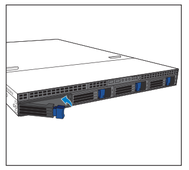
Install the Hard Disks (2.5")


1 Press the locking lever latch and pull the locking lever open.

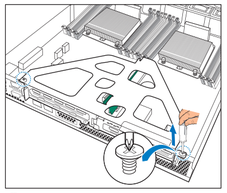

2 Slide the HDD tray out.

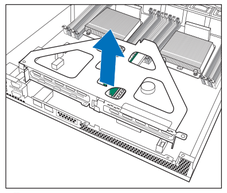

3 Place a hard drive onto the drive tray. Use four screws to secure the HDD.

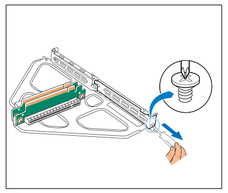

4 Reinsert the HDD tray into the chassis.

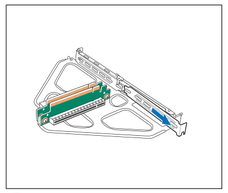

5 Press the locking lever to secure the tray. Repeat the same procedures to install other HDD trays.

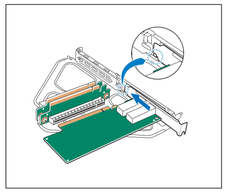
Installing the Add-On Card (Optional)

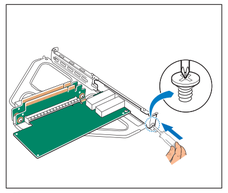

1 Unscrew the riser bracket.

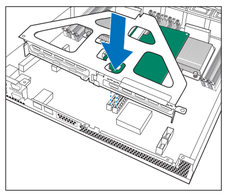

2 Lift the riser bracket up.

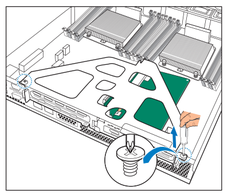

3 Flip the riser bracket and place on the surface. Then unscrew the PCI dummy bracket.


4 Slide to remove the PCI dummy bracket.


5 Insert the add-on card to the riser bracket. Make sure the add-on card is latched unto the riser bracket.


6 Secure the add-on card to the riser bracket with the screw.

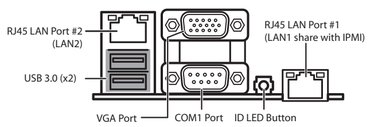

7 Carefully flip the riser brakcet. Then insert the riser cards to the PCIE slots as you align the riser bracket onto the chassis.


8 Secure the riser bracket to the chassis with two screws.

NOTE: To install the other add-on card to the riser bracket, please refer to the barebone user's manual on our Web site at http://www.tyan.com for details.

4 I/O Ports

Locate the External I/O Port



5 Caution

CPU Cover for DOA/RMA

NOTE:
Please save and replace the CPU protection cap when returning the server board for service.